

## Refugio Incident - Phase III comments and replies from stakeholders

Comments provided by Stakeholders after review of the "Phase III: Guidelines for Maintenance and Monitoring" document.

Responses to stakeholder feedback/comments have been developed by the Planning Section in the Refugio Incident Command in consultation with applicable subject matter experts.

This document has been added to as comments/replies are received and the Phase III document has been updated.

Latest version of this document is 29 July 2015

Name	Stakeholder	Date	Comment	Response
Diane Black	SB Co.	24-Jun-15	The "Guidelines" describe a very general procedure for follow-up monitoring. It is inferred that "standard" sampling by SCAT protocols will be employed. More detail as to how the follow-up assessment will be performed would be useful.	Because the teams that are implementing this monitoring and maintenance plan are knowledgeable/trained in the SCAT survey process/procedures and because SCAT survey procedures are lengthy it would not be appropriate to add SCAT survey protocols to this document and SCAT survey protocols were not included in either Phase 1 nor Phase 2 cleanup endpoint documents; so we added a link to the NOAA Shoreline Counter Measures Manual to the Phase III maintenance/monitoring plan which has all the details for how SCAT surveys are conducted and also has information on how cleanup endpoints are developed. Sampling protocols/methods are described in the <i>Overview Oil Sampling Assessment, July 8, 2015</i> document (OOSA).

Name	Stakeholder	Date	Comment	Response	page 2
Diane Black (cont.)	SB Co.	24-Jun-15	What are the criteria for determining that no further cleanup action is feasible or necessary? Specifically, how are the 1% sand and 10% gravel/cobble/rock/cliff Phase II endpoints assessed in the field?	For segments that do not currently meet phase II endpoints, the criteria that no further cleanup action is feasible or needed is based on 1) the Refugio Incident June 6 "Constraints Assessment Team (CAT) Activities Related to Cleaning of Cliff Faces and Contiguous Rocky Prominences" document (and the follow up General Messages re CAT); and/or 2) best professional judgement of SCAT team based on SCAT survey taking Net Environmental Benefits Analysis (NEBA) approach into consideration (as discussed in the NOAA SCAT manual). CAT identified cultural, archaeological and geological (safety) constraints and areas cleanup crews cannot enter. As far as what criteria is used to determine no further cleanup is necessary/feasible, if it meets the UC agreed upon cleanup endpoints then no further cleanup is necessary. Regardingt how are the endpoints (e.g., 1% sand and 10% gravel/cobble/rock/cliff Phase II endpoints) assessed in the field, this is done based on visual observations from the SCAT survey team and we added clarification to Phase III plan.	
			Does the procedure include sampling and laboratory analysis to determine if the material is spill related or "background" tar/oil?	This issue has been discussed with SMEs and UC. The intent of the UC is to verify if the oil found on the beaches is from Line 901 oil or not. The RPs contractor has done additional comparisons to established local natural seep sources. However, the UC intends the sampling efforts of the Refugio Unified Command and personnel assigned to this response will only verify if the oil found is Line 901 oil or not.	

Name	Stakeholder	Date	Comment	Response	page 3
Diane Black (cont.)	SB Co.	24-Jun-15	Are there thresholds or other factors that dictate what is considered infeasible (e.g. worker safety, possible impacts to benthic or sessile marine life if cleanup were to be pursued)?	A document was prepared as part of the response titled the Refugio Incident June 6 "Constraints Assessment Team (CAT) Activities Related to Cleaning of Cliff Faces and Contiguous Rocky Prominences" document (with update). This document outlined areas of geological hazards (rocky cliffs w/ overhangs) that are safety hazards for workers so certain areas cannot be cleaned due to safety, geological issues. There are also cultural monitors and archeologists we are coordinating with that have identified some areas off limits to cleanup/access for those concerns; snowy plover nesting areas off limits unless there is a bio monitor present and closely monitored and we also don't want rock cleaning on rocks with intertidal biota present based on biological monitors input.	
			For how long will the twice-monthly maintenance and monitoring visits be continued?	This was clarified in the latest version of the Phase III document; monitoring is recommended to extend through March 2016. The UC retains the authority to reevaluate and adjust response and recovery efforts. In March 2016, the UC assess the progress and status of this response.	
			A description of the "sign-off" process would be useful. What is meant by best available data?	The inspections for the sign-off process follows standardized SCAT procedures and protocols which are described in the NOAA Shoreline Countermeasures Manual. For more information on the SCAT process on the NOAA website (see plan for specific site). Added this reference to the Phase III doc. The mention of using best available data was deleted. The best available data includes data from the SCAT surveys and any associated lab data that may be available or pending for a particular segment. The Phase III plan now reads "Segment sign-off is based on using visual field observations by the SCAT team and/or if laboratory data is available for a segment the lab data will also be taken into account as part of the evaluation."	

Name	Stakeholder	Date	Comment	Response	page 4
Diane Black (cont.)	SB Co.	24-Jun-15	How are credible reports of "re-oiling" (i.e. from Co. monitors or public) to be integrated into this process? Is the follow-up monitoring limited to those specific shoreline segments not meeting "end-point" criteria for the "original" spill event?	Reports will be processed through the USCG/CA OES as normal reports. USCG and CA DFW will investigate as they would any report. At this point in the response fresh oil should be treated as unrelated to the Line 901 oil. In addition to the Sampling event on 9-10 July, there will be 2-3 more sampling events to determine if oil found by SCAT team is linked to the Line 901 oil. If samples taken during the sampling events are found to be linked to Line 901, SCAT will revisit the Division/Segment and determine the proper course of actions.	
			How does it impact the process that discoveries on previously cleaned up areas are defined as "new incidents"?	New incidents (fresh oil) will be investigated by USCG and CA DFW. They will investigate the event to determine if clean up is required and feasible; if they determine sampling is necessary, those agencies will carry out their investigation as they would for any reported oil spill. If it is determined to be oil from Line 901, that segment will be surveyed by SCAT and a recommendation will be made to the UC.	
			It's not clear under what circumstances additional cleanup would be recommended. For example, what changed conditions (e.g. removal of sand overburden exposing buried tar deposits) would initiate or warrant additional cleanup?	SCAT teams will periodically survey areas in which cleanup endpoints are not met. They will use the procedures found in the NOAA Shoreline Countermeasures Manual to assess additional cleanup is necessary or if monitoring is best course of action. SCAT surveys includes digging trenches to determine if subsurface oiling exists. SCAT teams have been surveying segments for buried oil throughout the response by digging trenches. From the segments surveyed by SCAT teams, subsurface oil has been observed in trenches in Operational Divisions I, J, and K but primarily at Refugio Beach (Division J). The subsurface oil in Div I consisted of oiled cobbles/boulders which are being cleaned. At east end of J/west K there were oil mats that were dug up and oiled cobble being cleaned. Also at Refugio unrecoverable sheen was observed in interstitial water in many pits dug. Also, a June 24 report titled "Sunken Oil Assessment Survey Results: Refugio Incident" summarizes a study lead by NOAA which address these issues.	

Name	Stakeholder	Date	Comment	Response	page 5
Bob Troy	SB Co. OEM	7-Jul-15	This now includes signed-off segments from Arroyo Hondo to Goleta Beach – very positive. If other areas are found to have positive 901 results during the OOSA, will they be included as well? We concur that these segments should be monitored monthly “throughout the 2015- 2016 winter storm season”. The text and the first flowchart should be revised to reflect this.	Agreed. This has been incorporated into the latest Phase III plan and flowchart.	
			On page 2, paragraph 6, we suggest “significant storm events” be defined as at least a half inch of rain in a 72 hour period. Monitoring of any subsequently signed off segments should still occur during the winter storm season.	After consultation with NOAA SSC, we decide to not use rainfall as a qualifier for 'Significant Storm'. We chose to define Significant Storm as any "Small craft advisory or a significant wave height of 3m and period >16 seconds with wave direction from the WestSouthWest (260°-290°)." Furthermore, the FOSC-USCG suggested dropping Small Craft Advisory since the event with potential impact will occur with specific wave height, period and direction to directly affect the beaches along this coastline.	
			The County of Santa Barbara requests to be a formal member of SCAT, to the degree that training and certification will allow.	Agreed. The County needs to provide the SCAT coordinator or Environmental Unit Leader with names of personnel for calibration. For the purpose of SCAT, two staff are required to participate each day while surveys are being conducted. The SCAT team members need to have been delegated the authority (in writing) to make treatment recommendations, recommendations and are able to sign-off on behalf of the Agencies who have Jurisdictional Authority for these issues.	

Name	Stakeholder	Date	Comment	Response	page 6
Bob Troy (cont.)	SB Co. OEM	7-Jul-15	In the partial paragraph on the top of page 3, different forms are proposed depending on whether Phase II signoff has occurred. If Phase II areas require additional cleanup based on the survey, shouldn't the more detailed process/forms be used?	Correct. The reference to a 'quick form' has been removed.	
			In the first full paragraph on page 3, please clarify that any segments under Phase III which are signed off as meeting Phase II endpoints are still subject to further observation/survey after storm events.	The areas and process for re-introduction of segments into the process of clean up and/or continued monitoring are clarified in the latest version of the Phase III plan. The UC will consider areas outside of the established boundaries on a case-by-case basis as mentioned in the response above.	
			In the second full paragraph, why are segments which meet Phase II endpoints only to be sampled once? This seems to contradict other sections of the document.	The sampling process and frequency has been clarified.	

Name	Stakeholder	Date	Comment	Response	page 7
Bob Troy (cont.)	SB Co. OEM	7-Jul-15	In the last paragraph on page 4, it is not clear why "or in the event that additional Refugio incident contamination is discovered" is included in the list of items agencies can pursue separate from the UC cleanup oversight.	These statement was intended to remind readers that the options remain open for any agency with the regulatory oversight and authority to ensure spilled oil is cleaned up by the appropriate responsible party.	
Thea Tyon	Central Coast Water Board	25-Jun-05	Reviewed this document and don't have any major comments.	No response needed	
			Would like a statement in here that says that this sign-off does not include the Section 5 Cliff Area	This statement has been added.	
			CCWB will evaluate long term monitoring needs for this area after we determine what the results of the upcoming remediation activities are.	No response needed	
Jeff Phillips	US FWS	25-Jun-15	Generally agreeing with the comments made by other reviewers, I have no comments or edits to add	No response needed	
Melissa Boggs	CA DFW	20-Jun-15	Updates to Flowchart needed	No response needed	
			Various comments which are inserted into the document.	No response needed	

Name	Stakeholder	Date	Comment	Response	page 8
Elizabeth Petras	NMFS	25-Jun-15	If any Black Abalone are found, please contact NMFS.	As this issue is something the EUL (CA DFW) is aware of, we chose not to further elaborate in this document.	
Nate Cox	CA State Parks	25-Jun-15	No comments	No response needed	
Jacqui Michel	Research Planning	23-Jun-15	The process by which a segment is included in Phase III is not clear and needs to be better articulated	This issue has been clarified.	
			There is no clear process by which monitoring ends if NOO or NFT for a segment. flow chart doesn't have a way to sign these segments out	This issue has been clarified. Determination will be made by SCAT.	
			How long the M&M will go on?	This issue has been clarified.	
Paul McCaw	SB Co. Environmental Health	25-Jun-15	Various small comments	No response needed	
Tre Wharton	RP EUL	25-Jun-15	Phase III should only include Divisions which have not met Phase I or Phase II endpoints	The areas which are re-introduced into this process through sampling or other methods will be evaluated and considered by SCAT. It was determined that consideration for segments which are found to have Line 901 oil need to be further evaluated. The steps to evaluate, recover oil and have signs-offs in the latest Phase III document are designed to ensure Line 901 oil is removed from the environment as directed by the UC.	



Name	Stakeholder	Date	Comment	Response
Tre Wharton (cont.)	RP EUL	25-Jun-15	Additional Segments can be added if the OOSA determines that there are areas which have Refugio (line 901) oil.	This has been considered and included into the latest Phase III document.
			Need clarification on 'Significant Storm'.	Clarification on this definition has been included.
			Segments which have met endpoints should not be resurveyed or resampled.	It was determined by EUL and PSC that SB Division I through P are the appropriate areas considering the Fisheries Closure and Response Actions which have been conducted in the area.
Jonathan Bishop & Alison Dettmer	California Coastal Commission	16-Jul-15	Asked for further clarification on the investigation, monitoring and cleanup processes for oil found on the beach post-emergency.	Information regarding the process of handling new reports of oil has been expanded in the Phase III document.
Wade Bryant	RP EUL	12-Jul-15	Comments on made on 12 July version of the Phase III document: current monitoring of active segments seem reasonable.	No response needed

Name	Stakeholder	Date	Comment	Response
Wade Bryant (cont.)	RP EUL	12-Jul-15	Based on all available data gathered to date, I (Wade Bryant) do not support the continued fingerprinting of oil on beaches, unless Line 901 oil is found based on the samples collected July 9-10. Considering the neg. results of the submerged oil survey, lack of discernable line 901 oil in the open water after May 23, the of all fingerprinting samples to date, & limited extent of buried oil in the upper intertidal areas as determined by SCAT, in my opinion, provide ample support to discontinue fingerprinting sampling from this point forward.	Sampling of impacted areas (SB Div I-P) seems to be reasonable to ensure response actions are not concluded prematurely. These periodic sampling events will provide further reassurance that all efforts have been taken by the UC (FOSC, SOSC, LO SC, and RP). If samples come back as positive match, there is a process for SCAT to determine cleanup actions necessary and the possible re-signing off of segments from bi-weekly monitoring.
Pat Hodgins	RPIC	14-Jul-15	Agrees with comments made by W. Bryant and T. Wharton. Fingerprint samples continue to come back as negative when compared to Line 901 oil. There have been weeks of negative test results for Line 901 oil on the beaches.	No response required.

Name	Stakeholder	Date	Comment	Response	page 11
Pat Hodgins (cont.)	RPIC	14-Jul-15	Phase III plan (page 5 of 6) should read "pursuant to applicable laws, or in the event that additional Refugio Incident ( <b>Line 901 oil</b> ) contamination is <b>discovered that did not meet Phase II cleanup end points . "</b> "	Phase III document has been adjusted to reflect this comment.	
Capt. Jennifer Williams	FOSC - CG	14-Jul-15	Definition of Significant Storm being tied to a small craft advisory will significantly increase the number of events.	The definition of significant storm has been adjusted to remove the connection to the small craft advisory. Additionally, links to the UCSD (Scripts) website has been included in the Phase III document for wave height, period and direction have been included as the common source for identifying when the trigger points have been met for a significant storm. Additionally, the expectation is that the first storm event will trigger a sampling event (not automatically an increase in segment monitoring) . The two remaining sampling events will be conducted in December 2015 and March 2016. The number of subsequent storms will not contribute to the amount of sampling events which occurs.	
Diane Black & Renee Bahl	SB County	16-Jul-15	Unclear if they will go back and test areas the met Phase 2 endpoints if there is re-oiling,. The document contradicts itself in a number of places. Of course, we want re-testing with re-oiling regardless if it met Phase 2 endpoints or results of finger printing, that is the whole point.	The Phase III document has been clarified to explain what process and methods are available to allow for new oil reports to be evaluated, investigated and added into the cleanup, maintenance and monitoring actions.	

Name	Stakeholder	Date	Comment	Response	page 12
Diane Black & Renee Bahl (cont.)	SB County	16-Jul-15	Document allow for 'inconclusive' test results. Phase II dealt with this result and so should Phase III.	The use of the term 'inconclusive' is intended to provide possible outcomes of the sample analysis. All sample events will be conducted in accordance with the approved processes established in this response. The results will be reviewed and recommendations will be made by SCAT and/or EUL to the UC.	
			Significant storm needs to be revised and not be based on winds. Should be waves or rain.	Definition of Significant Storm has been clarified.	
			"SCAT teams will revisit and monitor the conditions in these locations every two weeks until endpoints have been met" this does not address clean up. We are not interested in monitoring and waiting for sand to re-cover oil, we want it cleaned if it is 901.	When the segments are surveyed by SCAT, they will make a determination if clean up is possible. If it is, crews will be deployed. If it is not feasible, the site will be revisited to monitor and assess the progress of natural attenuation.	
			We disagree with March 2016 end date. If we don't have a significant storm year, then we won't have reoiling to sample. It absolutely needs to go on longer than next spring. I think to spring of 2018, but would compromise to spring 2017. 2016 is WAY too early since our storms have been few and far between. It also seems to bypass discussion with local govt.	The current plan for Phase III provides for sampling at 2-3 additional times and events. The last item on the flow chart and in the Phase III document indicates SCAT will make a recommendation to the UC. At this point the UC can evaluate the previous response efforts and make a determination as to how to proceed. This is their prerogative and this document will not be used to constrain future requirements/conditions.	

Name	Stakeholder	Date	Comment	Response
Diane Black & Renee Bahl (cont.)	SB County	16-Jul-15	County will be on SCAT. Both P&D Staffer and Storrer company.	This request has been made before and the conditions for participation has been explained. Please provide the information as requested so further calibration and coordination can occur.
Jennifer Gold	EUL/CA DFW	16-Jul-15	Add into the flowchart the option for SCAT to make recommendation that specific sampling can be conducted when clean up operations are being conducted to assist with the delineation of 901 oil from other oils on the beach.	This adjustment has been made to the flowchart and Phase III document.
P. Hodgins (PAAPL), J. Williams (USCG), M. Waldon (EPA), M. Crossland (CADFW), R. Rockabrand (SB Co.)	UC	28-Jul-15	Modify the last sampling period in this Phase III document from March 2016 to May 2016.	Item has been changed in the latest version of the Phase III document (dtd 28 July 2015).

Name	Stakeholder	Date	Comment	Response
P. Hodgins (PAAPL), J. Williams (USCG), M. Waldon (EPA), M. Crossland (CADFW), R. Rockabrand (SB Co.)	UC	28-Jul-15	Change the extent the sampling footprint from SB divisions I-P to SB divisions I-T to encompass all areas of Southern Santa Barbara County.	Item has been changed in the latest version of the Phase III document (dtd 28 July 2015).
R. Rockabrand (SB Co), P. Hodgins (PAAPL)	LOSC/RPIC	28-Jul-15	Include wording that the UC will consider available options if no significant storm occurs by May 2016.	Wording has been modified to reflect this possibility.